

U.S. Patent Application Serial No. 10/660,761
Response filed May 19, 2005
Reply to OA dated February 23, 2005

REMARKS

Claims 1-8 are pending in this application. No amendment is made in this Response. It is believed that this Response is fully responsive to the Office Action dated **February 23, 2005**.

Claims 1-5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Neubauer et al. (US 5,328,797). (Office action paragraph no. 5)

The rejection of claims 1-5 and 7 is respectfully traversed.

Claim 1 of the present invention recites as one element "a heat-sensitive layer made of an alkali-soluble polymer formed on the surface of the substrate". The Examiner cites Neubauer's "photosensitive mixture" which is applied to a base to make a layer (abstract) as corresponding to the recited "heat-sensitive layer".

However, Applicant notes that Neubauer states that the coated layer is "photosensitive," not "heat-sensitive". The present specification explains on pages 1-2 how these terms are distinguished from each other. Specifically, a "photosensitive" material is sensitive to visible or ultraviolet light, and a "heat-sensitive" material is sensitive to heat generated by absorbing infrared or near-infrared light (page 2, lines 1-5).

Neubauer's photosensitive material is exposed to actinic light, the reference stating that visible light, long-wave UV, short-wave UV, laser, electron and X-ray radiation can be used (column 7, lines 46-55). The reference also states more explicitly that the photosensitive range is from 200

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nm to 800 nm (column 7, line 54). 800 nm is at the boundary of the visible with the near infrared, and Neumann is clearly using the term “photosensitive” in the same manner as does the present specification. Neubauer’s “photosensitive” layer is therefore not “heat-sensitive,” and Applicant submits that Neubauer does not disclose a “heat-sensitive” layer.

Moreover, as the basis for stating that the contact angles of claim 1 are inherent in Neubauer, the Examiner states that Neubauer’s layer “comprises a copolymer exemplified by Applicant.” Presumably, this refers to the use of a methyl methacrylate/methacrylic acid copolymer, which is used in Neubauer’s Example 4 and Example 8 of the present invention.

However, Neubauer’s composition is **not** the same as that used in the present specification. Neubauer uses a crosslinking-type curing system (column 5, line 9) using diazonium salt polycondensation products as photosensitive compounds (column 4, lines 7-12). The heat-sensitive compositions in the present specification are non-crosslinking type, and do not have diazonium salts.

Since the layers in Neubauer and the present invention are chemically different, there is no basis for concluding that Neubauer’s layer would inherently meet the contact angle limitations recited in claim 1. In addition, one of the limitations involves contact angles of the heat-sensitive layer **after heating at 150°C**, and Neubauer’s photosensitive layer is designed to react to light, not heating.

Claims 1-5 and 7 are therefore not anticipated by Neubauer et al. (US 5,328,797).

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Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Watanabe et al. (US 6,509,133). (Office action paragraph no. 6)

Watanabe '133 is nominally prior art under 35 U.S.C. 102(e) as of its filing on March 24, 2000. As the Examiner notes, there are two inventors in common between Watanabe '133 and the present application: Yasuyuki Watanabe and Naohito Saito. As noted by the Examiner, if the relevant disclosure relied on in the rejection was invented by either Y. Watanabe or N. Saito, the reference would not represent invention by another.

Applicant has therefore attached a Declaration under 37 CFR 1.132, signed by Dr. Watanabe, stating that Dr. Watanabe and Mr. Saito invented Example 1 in Watanabe '133, and that Example 1 in Watanabe '133 was not invented by anyone other than Dr. Watanabe or Mr. Saito.

Since Example 1 appears to be the relevant disclosure in Watanabe '133, Applicant submits that the rejection is overcome by the filing of the Declaration under 37 CFR 1.132.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicant's undersigned agent at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

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In the event that this paper is not timely filed, Applicant respectfully petitions for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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Enclosure: Declaration under 37 CFR §1.312

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